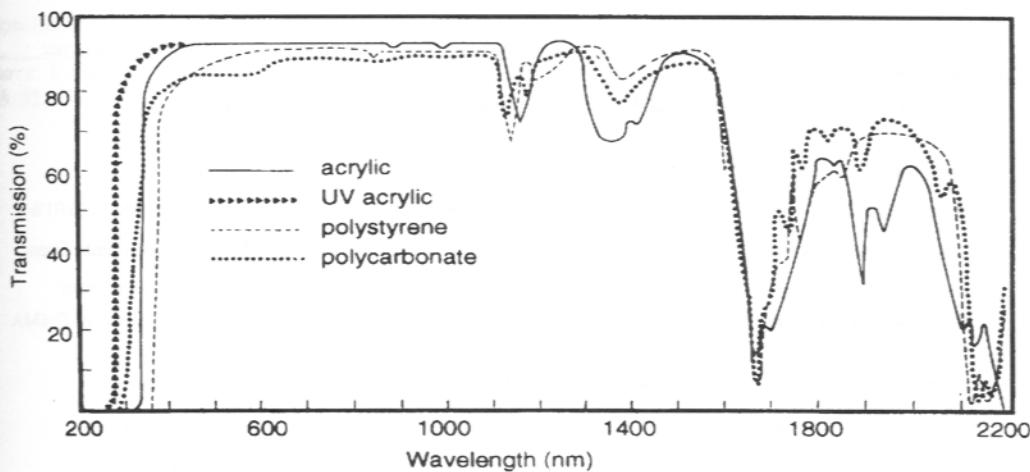


Properties of optical plastics—I—continued

Polymer	Trade name	Manufacturer	Density (g/cm ³)	Index <i>n</i> _D	Abbe <i>v</i> _D
Dicyclopolyolefin	Telene	B F Goodrich	1.0	1.528	55.3
Epoxy molding compound	MG-18	Dexter Corp. (Hysol)	1.35	1.52	
Tricyclodecyl co-methacrylate (TCDMA)	OZ-1000	Hitachi Chemical	1.16	1.500	57
Low moisture acrylic	WF-201	Mitsubishi Rayon		1.495	58
Allyl diglycol carbonate	CR-39	PPG Industries	1.32	1.498	59.3
Polymethylmethacrylate	Plexiglas	Rohm and Haas	1.19	1.491	57.4
PMMA, acrylic	Acrylite	Cyro	1.19	1.491	57.4
	CP	ICI	1.18	1.491	57.4
	Perspex	ICI	1.18	1.491	57.4
	Shinkolite P	Mitsubishi Rayon	1.19	1.491	57.4
Polymethylmethacrylate					
impact modified, 20%	MI-7	Rohm and Haas	1.17	1.49	
impact modified, 40%	DR-G	Rohm and Haas	1.15	1.49	
Poly(4-methylpentene-1)	TPX RT-18	Mitsui Plastics	0.833	1.463	56.3
Cellulose acetate butyrate (CAB)	Tenite	Eastman	1.15–1.2	1.46–1.49	51.9
Fluoropolymer (TPFE)	Teflon AF 1600	DuPont	1.8	1.32	92

Optical Transmission

Optical plastics transmit well in the visible and the near infrared, but absorb strongly in the ultraviolet (fluoropolymers are an exception) and throughout the infrared. Most plastics degrade somewhat both in physical and optical properties when exposed to ultraviolet radiation.



Transmission spectra of optical plastics, sample thickness: 3.2 mm.